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APPLICATION N	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,474		11/30/2004	Charles Loboz	041-544-L	2848
27276	7590	03/20/2006		EXAMINER	
UNISYS	CORPOR	ATION		PRIETO, I	BEATRIZ
UNISYS	WAY				
MAILST	OP E8-114			ART UNIT	PAPER NUMBER
BLUE BE	BLUE BELL, PA 19424-0001			2142	
				DATE MAIL ED: 03/20/2000	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/516,474	LOBOZ ET AL.						
Office Action Summary	Examiner	Art Unit						
	Prieto B.	2142						
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).						
Status								
1)⊠ Responsive to communication(s) filed on 30 No	ovember 2004.							
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closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>1-3 and 5-9</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-3 and 5-9</u> is/are rejected.								
7) Claim(s) is/are objected to.								
	·							
Application Papers	·							
···	_							
9) The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>30 November 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
11) I he oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P10-152.						
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:								
<u> </u>	1. Certified copies of the priority documents have been received.							
<u></u>	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the prior	•	ed in this National Stage						
application from the International Bureau	, ,,,							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
<ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Ma:I Date 11/04.</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate latent Application (PTO-152)						

## **DETAILED ACTION**

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joffe et. al. (US 6,185,619) in view of Attanasio et. al. (US 5,918,017) in further view of Evans, et. al. in A communication-Ordered Task Graph Allocation Algorithm, UUCS-92-026, April 1992, p. 1-25.

Regarding claims 1-3 and 5-9, Joffe et. al. teaches substantial features of the invention as claimed including a computing system comprising

a client (25 of Fig. 1C column 5, lines 1-5, 3-67) and a plurality of servers (column 5, lines 10-32, plurality of servers see column 9, lines 26-39) for serving client request (see column 6, lines 46-66), further including

assigning (scheduling) request transactions within a computing system (see column 3, lines 44-63), including receiving a client transaction request from a client (25 of Fig. 1C) (column 11, lines 27-29); determining the number of currently open TCP connections and the server processor idle time (column 12, lines 17-23, column 30-37, 55-61) and forwarding the transaction request to the best server available among a plurality of server based on best metric value;

however although Joffe et. al. suggest directing the transaction request to the most idle server process, it does not explicitly teach forwarding transaction request to server process having currently opened connection, i.e. connection that have not time out since the last finished execution of a previous transaction (column 5, lines 14-35). Attanasio's et. al. teachings for forwarding transaction request to

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server process having currently opened connection, i.e. connection that have not time out since the last finished execution of a previous transaction (Attanasio: column 5, lines 2-13, column 10, lines 25-50)

It would have been obvious to one ordinary skilled in the art at the time the invention was made given Joffe's et. al. suggestion of considering still opened connections that have recently finished execution of a previous transaction and therefore have not timeout and closed after the last finished execution as the best server to which transactions request should be forward, to consider Attanasio's et. al. teachings for forwarding transaction request to server process having currently opened connection, i.e. connection that have not time out since the last finished execution of a previous transaction. Motivation would be to maintain in a gateway transaction processing software the status of server processes include a connection table of the most recently finishes execution of the previous transaction in a dynamic connection table maintaining the status of the server processes.

Joffe et. al. further teaches a gateway (column 9, lines 27-39) for receiving and allocating transactions request from clients (column 9, lines 40-59) via a director routing policy (column 11, line 65 to column 11, line 14); storing the most recent finish time, i.e. non-timed out connections and the status of a server process (Joffe: column 11, lines 66-column 112, line 23, Attanasio: column 5, lines 2-13, column 10, lines 25-50); method is a software implementation (see Joffe: column 4, lines 49-67), server process interacts with a processor executing the software implementation of the method (see Joffe et. al.: column 4, lines 49-67). However, neither Joffe or Attanasio teach using the most recently idle processor.

Evans discloses as prior art a list scheduling algorithm that creates a priority queue of task to be performed and queue of idled processors arranged such that the stack queue causes the most recently idled processor to be the processor selected for allocation (p. 9). One would be motivated to applied these teachings to the above-mentioned system because in doing so the selected task (transaction request for executing that task) is the one which gives the maximum saving in the communication time for the chosen processor which recently idled, as discussed by Evans, et. al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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Or Telephone:

(571) 272-2100 for TC 2100 Customer Service Office.

B. Prieto Primary Examiner TC 2100 March 17, 2006

BEATRIZ PRIETO
PRIMARY EXAMINER